

24407

**B. Tech. 5th Semester (F) Scheme (AUE) Examination,
December-2018**

AUTOMOTIVE DIESEL ENGINES

Paper-AUE-303-F

Time allowed : 3 hours]

[Maximum marks : 100

Note : Attempt five questions by selecting at least one question from each section. Question No. 1 is compulsory.

1. (a) Cetane number
- (b) Injection lag
- (c) Factors affecting delay period
- (d) Variables affecting engine performance. $5 \times 4 = 20$

Section-A

2. With neat sketches discuss the construction and working of four stroke diesel engine. 20
3. Discuss about :
 - (a) Diesel fuel properties 10
 - (b) Ignition Quality 10

Section-B

4. Discuss about construction and working details of distributor type pump with neat sketch. 20

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[P.T.O.]

5. Write about :

- (a) Pneumatic governor used in fuel injection system. 10
(b) Any two types of injection nozzles. 10

Section-C

6. Write about :

- (a) Knock in C.I. engine. 10
(b) Stages of Combustion in C.I. engine. 10

7. Explain different types of combustion chamber with neat sketches. 10

Section-D

8. Discuss in detail about types of super charging with neat sketches. 20

9. Write about :

- (a) Methods to improve engine performance. 10
(b) Diesel engine testing and performance. 10